

Application Serial No. 10/840,022

SEP 11 2007

Attorney Docket No. 12353-4

I. Listing of Claims

What is claimed is:

1. (Currently Amended) A method of manufacturing a high surface energy molded article with a mold having an inner surface, the method comprising:
 - applying a chlorinated polyolefin to the inner surface of the mold;
 - introducing a thermoplastic resin having a temperature of at least 190 degrees Celsius on the chlorinated polyolefin in the mold, the thermoplastic resin having a predetermined heat energy, to transfer at least a portion of the heat energy of the thermoplastic resin to the chlorinated polyolefin;
 - defining a molded article having a surface; and
 - maintaining contact of the thermoplastic resin and the chlorinated polyolefin for a predetermined time period to diffuse the chlorinated polyolefin through at least a portion of the surface of the molded article to increase the surface energy of the portion of the molded article for enhanced adhesion.
2. (Original) The method for manufacturing a high surface energy molded article in claim 1, wherein the step of applying the chlorinated polyolefin to the inner surface of the mold includes spraying a plurality of chlorinated polyolefin particles to the inner surface of the mold.
3. (Currently Amended) The method for manufacturing a high surface energy molded article in claim 2, further comprising the steps of:
 - applying an electrical charge to the plurality of particles of the chlorinated polyolefin substance; and
 - electrically grounding the mold injection molding apparatus.
4. (Original) The method for manufacturing a high surface energy molded article in claim 3, wherein the chlorinated polyolefin is a powder.
5. (Original) The method for manufacturing a high surface energy molded article in claim 2, wherein the chlorinated polyolefin is a chlorinated polyolefin solution.

BRINKS
HOFFER
GILSON
& LIONE

-2-

10. (Original) The method for manufacturing a molded article in claim 9, wherein the chlorinated polyolefin includes a chlorinated polyolefin powder.

11. (Original) The method for manufacturing a molded article in claim 9, wherein the chlorinated polyolefin includes a chlorinated polyolefin solution.

BRINKS
HOFFER
GILSON
& LIONE

-3-

Application Serial No. 10/840,022

Attorney Docket No. 12353-4

18. (Original) The method of manufacturing a high surface energy molded article in claim 17, wherein the substance includes chlorinated polyolefin and an electrically conductive substance.

19. (Original) The method of manufacturing a high surface energy molded article in claim 18, wherein the electrically conductive substance is selected from the group consisting of carbon, graphite, silver, nickel, and copper.



-5-

process. Rather, plastic foam molding processes, such as the process disclosed in *Ladney, Jr.*, occur at temperatures significantly lower than 190 degrees Celsius. The temperature at which foam molding occurs would be inadequate to melt a thermoplastic



-6-